

Survey of sites 5/9/88

	<u>N</u>	<u>E</u>	<u>ELEV.</u>	<u>Proposed</u>	<u>Location</u>
DM	45595.5	26629.5	5629.7	45,600 ^{4.5}	126610 ^{17.5}
C. Point	45794.6	27000.4	5630.2	45,800 ^{5.0}	127,000
Valley	45594.7	26922.6	5603.6	45,600 ^{5.3}	126,910 ^{12.6}
Sunday	45197.9	27073.6	5620.9	45,200	127,080
Crusher	45603.4	27618.0	5530.8	45,600	127,650

<u>N</u>	<u>E</u>
45,800	127,500
45,800	127,740
44,500	126,460
44,600	126,850
44,600	127,000
44,600	127,200
44,800	127,000
"	127,300
45,000	126,900
"	127,100
45,200	126,890
"	127,080
"	127,230
45,400	126,000
"	126,200
"	126,810
"	127,330

3/30/88

SECTION	EASTING	PROPOSED DEPTH	AZ/BEARING	PRIORITY	TARGET
44,400 N	125,705	300'	- -	2	fault, edg, pE
★ 44,400 N	126,960	600	- -	1	Ttp, fault, Tbx
"	127,070	1325' (1000 min)	- -	2	Ttp, fault
"	127,270	800	- -	2	Ttp, pE contact zone
"	127,470	700' 3125	- -	2	edh, Edg, pE fault
★ 44,600 N	125,580	600	- -	1	Ttp, Tbx
★ 44,600 N	126,850	700	- -	1	Ttp
"	127,000	1400 (1100 min)	- -	2	Ttp, fault zone, pE contact
"	127,200	800	- -	2	pE, fault
"	127,400	600 3100	- -	1	Ttp, fault (deep)
44800 N	126,000	500	- -	1	Ttp
"	127,000	1400 (1200 min)	- -	2	Ttp, fault, pE contact
"	127,300	950	- -	2	pE, Creek fault
"	127,500	650 3500	- -	1	Ttp
45000 N	125,990	400	- -	2	Ttp, pE contact
"	126,900	1350	- -	2	Ttp, pE contact
"	127,100	1250	- -	2	Ttp, pE contact
"	127,300	1050	- -	2	Ttp, pE contact
"	127,500	850 4100 1125	- -	2	pE, DMFZ, Creek fault
45,200 N	125,980	650	- -	1	Ttp, Tbx, Ttp, RFZ
"	126,890	1500	- -	1	Ttp, Tbx, Ttp, RFZ
"	127,080	1400	- -	1	Ttp, RFZ
"	127,230	1000	- -	2	Ttp, pE contact
"	127,450	900	- -	2	Ttp, fault
"	127,800	650 4100 1125	- -	2	

SECTION	EASTING	PROPOSED DEPTH	AZ/ ^{INCLIN.} BEARING	PRIORITY	TARGET
45,400 N	125,805	300	— —	2	E, pE, Ttp, CREEK fault
	126,000	A) 1000'	— —	1	E, pE, Ttp, DMFZ, CREEK fault
		B) 1500'	E-W, -75°		Ttp, DMFZ, Ttp/Tgtp margin
	126,200	A) 1200'	— —	1	Ttp, DMFZ, pE contact
		B) 1200'	E-W, -75°		Ttp, Tgtp/Ttp margin, Tgtp min.
	126,810	600'	— —	1	Tgtp FZ
	127,330	1250	— —	1	Ttp, RFZ, pE contact
	127,640	950 5100	— —	2	Ttp, NW fault, pE contact
45,600 N	125,775	450	— —	2	Ttp, pE contact, CREEK fault
	126,000	1200'	— —	1	Ttp, CREEK fault
	126,170	1400'	— —	1	Ttp.
	126,370	1500'	— —	1	Tbx a, Tgtp margin, Tgtp min.
	126,610	1200'	— —	2	Tgtp min.
	126,910	700'	— —	2	Tgtp FZ
	127,450	1550'	— —	1	Ttp, pE contact, NW fault zone
	127,650	750' 8750	— —	2	Ttp, pE contact
45,800 N	125,875	1050	— —	2	E, pE, Ttp, CREEK fault
	126,235	A) 700	— —	1	E, pE, possible fault zone
	"	B) 1250	— —	1	" " " "
	127,500	1200	— —	1	Ttp, pE contact, RFZ
	127,740	700 4200	— —	2	Ttp.

SECTION	EASTING	PROPOSED DEPTH	AZ / BEARING	PRIORITY	TARGET
45,950 N ★	126,295	950	- -	1	E, pE, Tbx, possible NE fault
46,000 N	125,750	850	- -	2	Ttp, E, pE, Creek fault
	126,095	800	- -	2	E, pE
	126,295	950	- -	1	E, pE, Tbx, possible ^{NE} fault
	127,450	1050	- -	1	Ttp,
	127,650	750	- -	2	Ttp, pE contact
	127,900	650 ⁶⁰⁰	- -	2	E, pE, RFZ
46,100 ★	126,400 000	1100	- -	1	E, pE,
46,200	126,065	250	- -	2	E
	126,820	550	- -	2	E, pE
	127,175	1050	- -	1	Ttp, UHFZ
	127,435	700 ₂₅₀	- -	2	Ttp
TOTAL	54	49,475	(916 / hole)	@ 25' / ft	1.24
#1 only	26	30,175	(1160 / hole)	@ 25' / ft	.755
					} W/O CONTINGENCY

LACANA GOLD INC.

Gilt Edge Project
Lawrence County, South Dakota

1984
Prospecting & Reconnaissance
Program

Lacana Gold Inc.
2005 Ironwood Parkway
Coeur d'Alene, Idaho

Cole H. Carter
April, 1985

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Appendix 1

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Plate 1

In Pocket

SUMMARY & RECOMMENDATIONS

Exploration on and near the Gilt Edge property defined areas with ore grade mineralization and established the viability of soil sampling in the area. One hundred forty rock samples and 130 soil samples were collected. The soil samples were collected from two grids. The east Gilt Edge grid had good contrast of values, and anomalous areas were delineated. An area with >1.0 ppm gold in soil was drilled, and hole RGE 84-8 averaged 0.029 oz/ton gold over 140 ft. The rock in the hole is unoxidized. Values on the Anchor Hill soil grid are significantly lower than on the east Gilt Edge grid. No follow-up work has been done on the Anchor Hill grid.

Handoo Gulch?
Rock samples were collected from pits, trenches, and outcrops, and encompass all rock types in the area. A gully 300 ft east of the Ora Bella adit exposes Cambrian and Precambrian rocks in contact with the Tertiary trachyte porphyry. The five samples from the gully averaged 0.035 oz/ton gold. Union Hill is 1000 ft north of the Sunday Pit, and 13 samples were collected from the area. Enrichment of gold is evident on Union Hill, but it appears that the potential for mineable tonnage is limited.

Numerous old workings and prospect pits are located east of the main Gilt Edge area in upper Ruby Gulch. Not all of this land is controlled by Lacana; however, strongly mineralized samples were collected from some of these unleased claims. For example, a dump sample from an old shaft assayed 2.16 oz/ton gold, and a nearby eight foot chip sample assayed 0.142 oz/ton. On the Portland claim, a 10 ft chip sample assayed 0.134 oz/ton. The good gold values and the proximity to Lacana-controlled land dictate that Lacana should make a concerted effort to acquire these claims. Additional work is needed in upper Ruby Gulch, and the geologically similar Butcher Gulch needs to be prospected. *Brosch-Fabrizi?*

Several anomalous rock samples were collected at Anchor Hill. These samples further define ore grade mineralization near the contact of the hornblende diorite and the sanidine rhyolite intrusive. Angle hole RGE 84-5 was drilled to test the contact mineralization; however, significant near surface mineralization was not encountered.

Only a small portion of the land west of Strawberry Creek was examined. Sampling did not indicate significant enrichment in the small trachyte bodies west of Strawberry Creek, so mineable tonnages would have to be hosted in the Deadwood Formation and the hornblende diorite. Thirty-one samples were collected. Gold values range up to 0.06 oz/ton for the widely spaced samples. Much additional prospecting is required in the area, and old workings should be mapped and sampled.

Exploration around Gilt Edge should continue during the 1985 field season. Priority should be given to securing uncontrolled land in upper Ruby Gulch and to systematically exploring the area. A few days of surface mapping and sampling would further define the anomalous areas and should be undertaken as soon as possible. Underground sampling and mapping is largely contingent on the accessibility of the shafts, so a brief examination is necessary prior to planning an exploration program.

Other areas warrant additional work. The gulch east of the Ora Bella should be mapped and sampled. Additional rock samples should be collected from the southwest part of the East Gilt Edge soil grid. The large area west of Strawberry Creek (which includes the Zelda claims) will take several weeks of mapping and sampling to fully evaluate. No additional work at this time is recommended for Union Hill or Anchor Hill.

Introduction

Much of the land peripheral to the main Gilt Edge area has not been prospected in recent time, so a program was launched during the 1984 field season to sample and map these areas. One hundred forty rock samples and 130 soil samples were collected during the 18 day program. Rock samples were fire assayed by Strawberry Hill, and pulps from 38 of the samples were sent to Bondar-Clegg (Denver) for check assays. The correlation coefficient for gold assays at the two labs is 0.999. Rock sample locations are based on topography with triangulation checks where possible. Areas with numerous pits and trenches were surveyed with a Brunton and Hip Chain. Brief descriptions of the individual samples were recorded on the sample cards but are not included in this report. Previous reports expound upon the geology and lithologies of the Gilt Edge area, and they should be consulted for additional geologic information.

Samples from two soil grids were collected in areas of poor rock exposure. The "B" horizon was sampled, and lithologies of the rock chips encountered while collecting the samples were recorded. Distances between sample stations were measured by Hip Chain and adjusted for slope correction. Soil samples were analyzed by Bondar-Clegg by the methods shown in Appendix 1.

In order to accommodate the sampling on existing topographic base maps, the sample locations are shown on six maps that are included in this report. Discussions of these areas follow. Many areas were not examined during this limited program, and additional mapping and sampling is necessary to evaluate the potential for economic mineralization in the areas with anomalous samples.

East Part of Main Gilt Edge

Work on the east part of the main Gilt Edge area included sampling a soil grid in an area of poor rock exposure and collecting rock samples. The East Gilt Edge soil grid is on the east slope of Hot Springs Ridge, south and east of the Ora Bella adit (plate 1). Previous workers mapped the area as principally trachyte porphyry on the basis of float. Eleven samples 100 ft apart were collected on the N35°E trending baseline. At 200 ft intervals along the baseline, perpendicular lines were run and samples were collected 100 ft apart. Thirty-four samples were collected on the initial grid. One sample, A10+00, is anomalously high (7175 ppb Au) and is probably contaminated from old diggings. Therefore, it was not included in the statistical manipulation of the data. Gold values of the soil samples range from 20 to 1295 ppb. Correlation coefficients (table 1) and contour plots show little relationship between the gold values and the values for silver, mercury, arsenic, lead, and copper. Geochemical results for antimony, bismuth, and tellurium were generally below or marginally above the detection limits for those elements.

Fifty-five fill-in samples were collected at 50 ft spacing to further define the anomalous areas. These samples were analyzed only for gold and silver; values are listed in Table 2. The strongest gold anomaly was west of the baseline on line A5 where four of the five samples are greater than the threshold value (mean plus two standard deviations) and the other sample was greater than the mean plus one standard deviation. A contour map of the gold data shows a westerly trend of the anomalous zone (fig. 1). Reverse circulation hole RGE 84-8 was drilled to test this anomaly. Cuttings from the hole had a mean of 0.020 ounces per ton gold and a 140 ft interval averaged 0.029. The rock in the hole is unoxidized and has up to 10% disseminated pyrite cubes.

Twenty-six rock samples were collected on the eastern part of the main Gilt Edge area (plate 1). Six of these samples are from within the East Gilt Edge soil grid. Several of the samples have anomalous gold values (table 3), and enrichment of gold is evident in a variety of rock types. The rock samples from the soil grid average 0.028 oz/ton gold. Most of these samples were trachyte porphyry collected from the rubble in small pits and trenches. Rock samples appear to show little correlation to soil sample values. All five samples from the previously worked gully east of the Ora Bella are anomalous with an average of 0.035 oz/ton gold. Lithologies of these samples include trachyte porphyry, hornblende diorite(?), shale, schist, and quartzite. Additional sampling is necessary to determine the significance of this anomalous area.

Table 1
SOIL SAMPLE GEOSTATISTICS

East Gilt Edge Soil Grid

Au (ppb) MEANS AND STANDARD DEVIATIONS

<u>Number of Samples</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>Mean + 2 Std. Dev.</u>
88	221	280	781

CORRELATION COEFFICIENTS

<u>Elements</u>	<u>Initial 33 Samples</u>	<u>Fill in Samples</u>	<u>Entire Grid</u>
Au, Ag	0.412	-0.094	0.090
Au, Hg	0.401		
Au, As	0.118		
Au, Pb	0.070		
Au, Cu	0.040		

Anchor Hill Soil Grid

Number of samples:	41
Au (ppb) mean:	88
Standard Deviation:	128
Mean + 2 Std. Dev.:	343

CORRELATION COEFFICIENT (Au, Ag): 0.392

Table 2

EAST GILT EDGE SOIL SAMPLES

Sample Number	ELEMENT UNITS	Cu PPM	Pb PPM	Ag PPM	Au PPB	Bi PPM	As PPM	Hg PPB	Te PPM	Sb PPM
A0+00		47	96	1.7	215	8	85	45	1.2	<2
A1+00		39	53	0.9	220	1	45	45	0.6	<2
A1+100E		48	192	3.8	1295	21	70	75	1.0	<2
A1+200E		55	56	1.3	55	<1	44	30	0.8	<2
A1+100W		73	132	1.4	205	7	78	65	1.0	<2
A1+200W		14	68	0.2	35	<1	26	60	0.2	<2
A2+00		19	67	0.4	100	<1	53	95	0.6	<2
A3+00		10	59	0.4	20	<1	27	25	0.2	<2
A3+100E		12	33	0.5	20	<1	22	25	0.4	<2
A3+200E		58	81	0.8	85	6	61	25	0.6	<2
A3+100W		15	45	0.3	85	<1	55	45	0.2	<2
A3+200W		21	57	0.2	40	<1	62	35	0.8	<2
A4+00		9	33	0.2	50	2	33	50	0.2	<2
A5+00		11	22	0.3	265	2	31	45	<0.2	<2
A5+100E		88	225	2.8	250	5	185	70	1.8	<2
A5+200E		63	61	1.1	440	14	70	65	1.2	<2
A5+100W		7	18	0.2	1290	4	54	60	0.2	<2
A5+200W		9	15	0.6	715	2	26	70	0.6	<2
A6+00		9	14	0.4	330	2	22	80	<0.2	<2
A7+00		7	29	0.3	680	<1	28	85	<0.2	<2
A7+80E		13	25	0.5	145	<1	23	30	<0.2	2
A7+200E		11	25	0.6	65	<1	25	30	<0.2	<2
A7+300E		12	51	0.6	45	<1	31	45	<0.2	2
A7+400E		13	30	0.3	105	<1	32	45	<0.2	<2
A7+100W		10	28	0.3	120	1	21	45	<0.2	<2
A7+200W		23	46	0.3	455	3	54	45	<0.2	<2
A8+00		20	235	0.5	70	<1	75	50	<0.2	<2
A9+00		19	69	0.6	285	5	90	60	0.2	<2
A9+200E		23	19	<0.2	35	1	26	65	0.2	<2
A9+300E		21	18	<0.2	40	<1	22	65	0.2	<2
A9+400E		19	61	0.6	140	2	55	65	0.2	<2
A9+120W		20	276	1.4	270	4	90	65	0.2	<2
A9+200W		27	176	0.5	85	2	52	75	<0.2	<2
A10+00		72	261	9.6	7175	24	255	1550	0.2	<2
A4+100E				0.5	15					
A4+150E				0.6	75					
A4+200E				1.5	90					
A4+250E				0.9	350					
A4+300E				0.9	115					

Table 2
EAST GILT EDGE SOIL SAMPLES
Page 2

Sample Number	ELEMENT UNITS	Cu PPM	Pb PPM	Ag PPM	Au PPB	Bi PPM	As PPM	Hg PPB	Te PPM	Sb PPM
A4+350E				1.5	145					
A4+400E				0.9	45					
A4+50W				0.2	145					
A4+100W				0.2	30					
A4+150W				0.7	75					
A4+200W				0.5	1160					
A5+50E				5.5	250					
A5+150E				0.7	50					
A5+250E				4.1	60					
A5+300E				1.8	270					
A5+350E				1.3	55					
A5+400E				0.7	35					
A5+450E				4.0	90					
A5+50W				0.4	885					
A5+150W				0.4	1010					
A5+260W				0.3	1000					
A6+50E				0.9	205					
A6+100E				0.4	145					
A6+150E				0.6	260					
A6+200E				0.4	545					
A6+250E				0.6	400					
A6+300E				1.3	335					
A6+350E				0.8	60					
A6+400E				0.7	25					
A6+50W				0.7	135					
A6+100W				0.8	125					
A6+150W				0.6	235					
A6+200W				1.2	215					
A7+50E				0.4	155					
A7+250E				0.5	220					
A7+350E				0.6	110					
A7+450E				0.9	50					
A7+50W				0.4	75					
A7+150W				0.7	145					
A8+50E				0.5	75					
A8+100E				0.6	155					
A8+150E				0.2	25					
A8+200E				0.3	65					
A8+250E				0.5	95					
A8+295E				0.5	140					

Table 2
EAST GILT EDGE SOIL SAMPLES
Page 3

Sample Number	ELEMENT UNITS	Cu PPM	Pb PPM	Ag PPM	Au PPB	Bi PPM	As PPM	Hg PPB	Te PPM	Sb PPM
A8+350E				0.3	20					
A8+400E				0.4	75					
A8+80W				0.7	55					
A8+150W				0.5	260					
A9+35E				0.5	340					
A9+150E				0.5	165					
A9+250E				0.3	40					
A9+350E				0.5	160					
A9+440E				0.6	100					
A9+160W				0.6	60					

Table 3

ROCK SAMPLES FROM EASTERN PART OF MAIN GILT EDGE AREA

Sample #	Strawberry Hill Assay (oz/ton)		Bondar-Clegg Assay (oz/ton)		ROCK TYPE	KIND OF SAMPLE
	Au	Ag	Au	Ag		
1860	.020	NF	.010	.08	Tsrp	10' chip
1861	.025	NF	.017	.24	Gdq	8' subcrop
1862	.020	NF	.027	.11	Gdq	10' subcrop
1863	.010	NF			Tsrp	10' trench rubble
1864	.020	NF	.012	.03	Tsrp	10' trench rubble
1865	.005	NF			Tsrp	10' subcrop/rubble
1866	.010	NF			Tsrp	10' subcrop/rubble
1867	.005	NF			p6	10' chip
1868	.010	NF			Ttp	6' rubble
1869	.020	.790	.024	1.04	Ttp?	dump grab
1893	.030	.150	.036	.22	Ttp	8' chip
1894	NF	tr			Ttp	6' chip
1895	.010	.185			Ttp	10' chip
1896	.025	.035	.016	.30	Thl+Ttp?	10' subcrop
1897	.030	.240	.037	.36	Ttp	chip
1898	.025	.95	.012	.15	Ttp	7' chip
1899	.040	.205	.024	.34	Ed	10' rubble composite
1900	.035	.680	.043	.66	bxn	8' chip
1901	.050	.035	.066	.08	p6	10' chip
1926	.020	NF			Gdq+Ttp	4' subcrop
1927	.010	.510			Ttp	4' chip
1928	.085	NF			Ttp	8' rubble composite
1929	.025	NF			Ttp	rubble composite
1930	.030	.105			Ttp	rubble composite
1931	.005	NF			Ttp	dump composite

Explanation

NF - none found

tr - trace

bxn - breccia

Tr - Tertiary rhyolite

Ttp - Tertiary trachyte porphyry

Tsrp - Tertiary sanidine rhyolite porphyry

Thl - Tertiary hornblende latite

Thd - Tertiary hornblende diorite

Ed - Cambrian Deadwood, q=quartzite, s=shale

p6 - preCambrian metamorphics

Union Hill

The Union Hill shaft is 1000 ft north of the old Sunday Pit at the north contact of the North Stock. The sanidine rhyolite porphyry intrusive is in contact with the trachyte porphyry, quartzite of the Deadwood Formation, and a thin zone of highly altered and bleached porphyritic volcanic rock (fig. 2). The altered rock is probably a dike of hornblende diorite porphyry. The shaft is caved and forms a nearly vertical-sided pit 50 ft in diameter. The original depth and the grades of mineralization encountered in the shaft are not known. Six vertical reverse circulation holes were drilled by AMOCO and Lacana in previous years in the area shown on Figure 2, and several of the holes had significant mineralized intercepts (table 4).

Thirteen rock samples were collected from the pits, trenches, and outcrops near Union Hill during the 1984 program. Six of the samples had anomalous gold values as shown on Table 5. Sampling distribution favored the quartzite and the hornblende diorite(?) due to the limited outcrop exposure. The trachyte is unmineralized where sampled.

East Gilt Edge - Upper Ruby Gulch

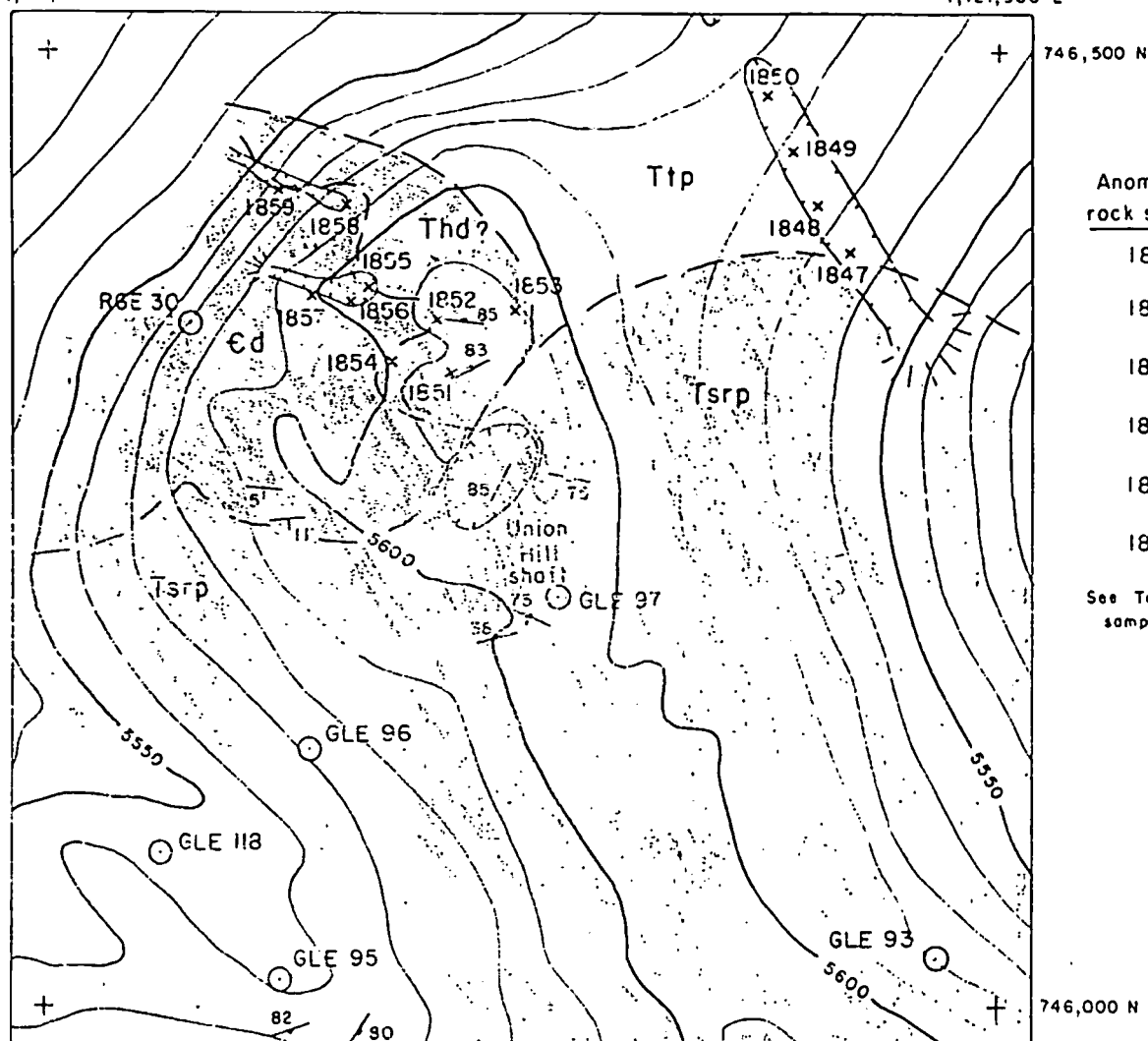
The ridge crest between Butcher Gulch and Ruby Gulch was traversed easterly from the main Gilt Edge property for two-thirds of a mile (fig. 3). Some of this land, the Borsch and Herbert claims, is controlled by Lacana, but Louis Eilers (M.S. 1561) and Ruth Hankins (M.S. 1905) also own ground in the area. Numerous old workings were discovered on their land and samples from their properties had the best values.

Tertiary-age intrusives form the ridge. The principal rock type is hornblende latite unit. The term "latite" was used as a descriptive field term rather than "diorite" because of the aphanitic groundmass. The rock is commonly fractured and iron-stained and in places it is bleached. The trachyte porphyry is typical of the Gilt Edge area. Minor quartz was noted in some samples. The Deadwood Formation occurs as small roof pendants or faulted wedges, also it is exposed in low saddles and in the Ruby Gulch drainage. The eastern portion of the area is covered by an unaltered white rhyolite. Some of the rhyolite has distinct phenocrysts of biotite. The structure of the area is not well understood, but it appears to be a primary control for mineralization. Attitudes of joints and shears were measured; this data needs to be incorporated into Mukherjee's (1968, unpublished Phd dissertation, Colorado School of Mines) work to understand the tectonics of the region.

Samples 1805-15 were collected on the southeast-trending ridge spur that runs from the center of section 5 down to Ruby Gulch (table 6). A considerable amount of work has been done on this ridge by early workers. Two shafts are open to depths

1,127,000 E

1,127,500 E



Anomalous rock samples	oz/ton Au (averaged)
---------------------------	-------------------------

1852	.027
1853	.013
1854	.032
1856	.032
1857	.014
1858	.022

See Table 5 for additional
sample values.

EXPLANATION

- Tsrp Sanidine rhyolite porphyry
- Ttp Trachyte porphyry
- Thd? Hornblende diorite? - strongly altered
- Cd Deadwood Fm.
- Approximate contact
- 38 Strike and dip of joint
- 5 Strike and dip of bed
- Trench
- x 1851 Rock sample location
- Drill hole location

0 50 100 feet
Scale

FIGURE 2

LACANA

GILT EDGE INC.

GEOLOGIC MAP
showing
ROCK SAMPLE LOCATIONS
UNION HILL AREA

Date: April 1985 Data by: LGI, CHC Drawn by: PYC

Table 4

UNION HILL DRILL HOLES

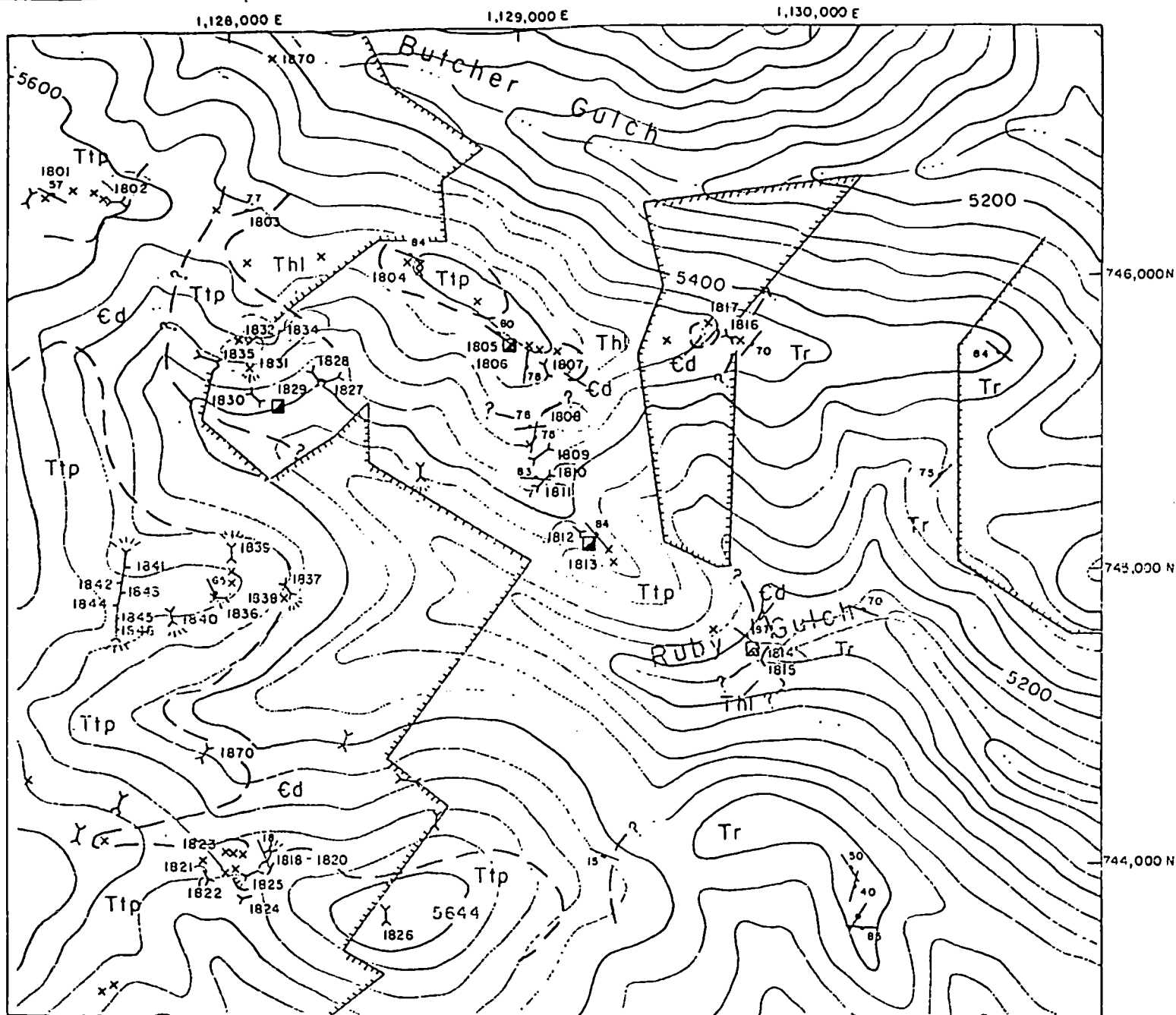
<u>Hole #</u>	<u>Interval</u>	<u>Thickness</u>	<u>\bar{x} Au (oz/ton)</u>	<u>Type</u>
GLE 95	39-179	140'	0.119	oxide
	179-199	20	0.037	sulfide
GLE 97	2- 42	40	0.023	oxide
	42- 62	20	0.025	mixed
	202-242	40	0.034	sulfide
GLE 118	101-121	20	0.023	oxide
RGE 30	0- 74	74	0.021	sulfide
	174-405	231	0.049	sulfide

Table 5
UNION HILL AREA ROCK SAMPLES

Sample #	Strawberry Hill Assay (oz/ton)		Bondar-Clegg Assay (oz/ton)		ROCK TYPE	KIND OF SAMPLE
	Au	Ag	Au	Ag		
1847	.010	NF			Ttp	10' subcrop
1848	.010	NF			Ttp	10' subcrop/rubble
1849	tr	NF			Ttp	10' subcrop/rubble
1850	tr	NF			Ttp	10' subcrop/rubble
1851	.015	NF			Thd?	5' chip
1852	.025	NF	.028	.70	Edq	10' chip
1853	.020	NF	.005	.17	Edq+Tr	rubble composite
1854	.035	.460	.029	1.07	Edq+Tr	4' chip
1855	.010	NF			Thd	10' chip
1856	.030	NF	.033	.26	Edq	10' chip
1857	.020	NF	.007	.12	Edq	10' chip
1858	.020	.150	.023	.20	Edq	10' chip
1859	.005	NF			Edq	5' chip

Explanation

NF	- none found	Tsrp	- Tertiary sanidine rhyolite porphyry
tr	- trace	Thl	- Tertiary hornblende latite
bxn	- breccia	Thd	- Tertiary hornblende diorite
Tr	- Tertiary rhyolite	Ed	- Cambrian Deadwood, q=quartzite, s=shale
Ttp	- Tertiary trachyte porphyry	p6	- preCambrian metamorphics



EXPLANATION

Tr	Rhyolite
Ttp	Trachyte porphyry
Thl	Hornblende latite
Ed	Deadwood Fm.
- - -	Approximate contact
/50	Strike and dip of joint
/18	Strike and dip of bed
■	Shaft
-	Adit
x	Prospect pit
Y	Trench
□	Land controlled by Lacana

Anomalous rock samples

1802	.015
1806	.064
1810	.043
1811	.041
1812	.142
1813	2.159
1814	.027
1815	.029
1818	.017
1832	.134
1833	.029
1834	.020
1835	.020

See Table 6 for additional sample values.

0 250 500 feet

Scale

FIGURE 3

LACANA

GILT EDGE INC.

GEOLOGIC MAP

showing

ROCK SAMPLE LOCATIONS

EAST GILT EDGE - UPPER RUBY GULCH AREA

Date: April 1985

Date by: CHC

Drawn by: PYC

Table 6

EAST GILT EDGE-UPPER RUBY CREEK ROCK SAMPLES

Sample #	Strawberry Hill Assay (oz/ton)		Bondar-Clegg Assay (oz/ton)		ROCK TYPE	KIND OF SAMPLE
	Au	Ag	Au	Ag		
1801	.010	NF			Ttp	chip composite
1802	.025	NF	.004	.07	Ttp	dump composite
1803	.015	NF			Ttp	10' chip
1804	tr	NF			Ttp	dump composite
1805	NF	NF			Thl	5' chip
1806	.085	NF	.042	.15	Thl	dump composite
1807	NF	NF			Thl	5' chip
1808	NF	NF			Ttp	5' chip
1809	NF	NF			Ttp	5' chip
1810	.050	.160	.035	.33	Ttp?	10' chip
1811	.050	.020	.031	.12	Ttp	5' chip
1812	.145	.335	.138	.41	Ttp	8' chip
1813	2.16	1.69	2.158	2.04	Ttp	dump grab
1814	.045	NF	.008	.02	Ttp+Thl	dump grab
1815	.030	NF	.028	.05	Edq	5' chip
1816	NF	NF			Ed	5' chip
1817	NF	NF			Ed+Thl	10' chip
1818	.014	tr	.014	.03	bxa	10' chip
1819	NF	NF			bxa	10' chip
1820	.010	NF			bxa	rubble grab
1821	.005	tr			Ttp+Tr	5' chip
1822	.005	NF			Ttp	10' chip
1823	tr	NF			Ttp	10' chip
1824	NF	NF			Ttp	10' chip
1825	.010	NF			bxa	rubble grab
1826	.010	NF			Ttp	5' chip
1827	tr	NF			Thl	6' chip
1828	.005	NF			Ttp	chip
1829	.010	NF			Ttp	5' dump channel
1830	.005	NF			Ttp	20' composite rubble
1831	.005	NF			Ttp	trench rubble grab
1832	.125	.11	.142	.29	Ttp	10' chip
1833	.030	NF	.028	.25	Ttp	10' chip
1834	.035	NF	.005	.24	Ttp	10' chip
1835	.025	.11	.014	.16	Ttp	15' composite rubble

Explanation

NF - none found

tr - trace

bxa - breccia

Tr - Tertiary rhyolite

Ttp - Tertiary trachyte porphyry-14-24

Tsrp - Tertiary sanidine rhyolite porphyry

Thl - Tertiary hornblende latite

Thd - Tertiary hornblende diorite

Ed - Cambrian Deadwood, q=quartzite, s=shale

- preCambrian metamorphics

Table 6
East Gilt Edge-Upper Ruby Creek Rock Samples
Page 2

Sample #	Strawberry Hill Assay (oz/ton)		Bondar-Clegg Assay (oz/ton)		ROCK TYPE	KIND OF SAMPLE
	Au	Ag	Au	Ag		
1836	.010	NF			Ttp	5' chip
1837	.015	NF			Ttp	composite trench rubble
1838	NF	NF			Ttp	composite pit rubble
1839	tr	NF			Ttp	20' composite rubble
1840	.005	NF			Ttp	15' composite rubble
1841	NF	NF			Ttp	10' subcrop/rubble
1842	tr	NF			Ttp+Tsrp	10' subcrop/rubble
1843	.005	NF			Ttp	10' subcrop/rubble
1844	.005	NF			Ttp	10' subcrop/rubble
1845	.010	NF			Ttp	10' subcrop/rubble
1846	.005	NF			Ttp+Thl?	10' subcrop/rubble
1870	NF	NF			Thl	7' subcrop

Explanation

NF	-	none found	Tsrp	-	Tertiary sanidine rhyolite porphyry
tr	-	trace	Thl	-	Tertiary hornblende latite
bxa	-	breccia	Thd	-	Tertiary hornblende diorite
Tr	-	Tertiary rhyolite	EJ	-	Cambrian Deadwood, q=quartzite, s=shale
Ttp	-	Tertiary trachyte porphyry	pE	-	preCambrian metamorphics

of at least 75 ft, and one shaft is caved at 40 ft. An open adit that strikes N40°W is located near one of the shafts. These workings could be explored with the proper equipment, but initial sampling was limited to accessible surface and dump samples. Dump sample 1813 assayed 2.16 oz/ton gold, and an eight foot chip sample from the portal of the adjacent adit averaged 0.142 oz/ton. Both samples are fractured, siliceous trachyte, and the chip sample has up to 2% disseminated pyrite. The principal joint set at the portal strikes N40°W and dips 84°NE. Samples 1810 and 1811 are chip samples from a 45 ft trench that is 250 ft northwest from the adit along the ridge. They averaged 0.043 and 0.041 oz/ton gold, respectively. Two inches of gouge is present on a N85°W, 83°N fracture. A caved shaft is present on the Cooper claim near Ruby Creek. Gouge was noted on a couple of fractures, and a N2°W, 40°E structure appears to be a fault contact when viewed from across the shaft.

The workings on the Portland claim consist of a caved shaft, several small pits, and a large pit. Samples 1832-4 were collected from a 20 ft diameter, 15-30 ft deep pit. The averaged gold assays in ounces per ton for the three 10 ft chip samples are as follows: 1832 - 0.134, 1833 - 0.027, 1834 - 0.020. A narrow shear zone (N20°E, vertical) bisects the pit. Samples 1832 and 1833 were taken across the structure and include adjacent fractured trachyte. The sample from the west side of the pit, 1834, does not transect the structure. A 70 ft long trench that trends N70°W was dug 80 ft southwest of the pit. A 15 ft composite rubble sample from the trench averaged 0.020 oz/ton gold.

Eight hundred feet south of the Portland workings is a group of trenches in the trachyte porphyry near the contact with the Deadwood Formation. The trachyte is sheared and silicified in places, and in some rocks the feldspars and the matrix are argillically altered. Eleven samples, 1836-41, were collected from the area (table 6). Assay results from these samples do not indicate enrichment of gold or silver.

The Golden Breccia claim was staked on the saddle between the North Gilt Edge stock and Hill 5644 to the east in August 1983. The claim is invalid as it overstates existing Lacana-controlled claims. Several trenches and pits expose a breccia zone near the obscured contact between the trachyte porphyry and the Deadwood Formation. Breccia fragments are up to 6 in., and small quartz veinlets are common in the fractured rock. Fractures are stained with iron oxide, and some of the rocks have 1% pyrite. Two small tunnels are present in the area--both are caved at the portal. One strikes N40°W and the other strikes N80°E. Samples 1818-25 had surprisingly low values for gold and silver. The maximum averaged value was 0.017 oz/ton gold for a 10 ft chip sample, but the rest of the samples assayed <0.01 (table 6).

Anchor Hill

Anchor Hill is underlain by an irregular oblate stock of sanidine rhyolite porphyry that intruded the older Tertiary hornblende diorite (fig. 4). The hill has been heavily prospected by early-day workers. Development work includes several pits and trenches, three shafts, and an adit. Production from these workings is not known. Mineralization is localized at the contact between the sanidine rhyolite and the hornblende diorite. Magnetic disturbances were noted in a couple of places on the east side of Anchor Hill. Twenty-two rock samples were collected during the 1984 program (table 7). The highest averaged value is 0.081 oz/ton gold, and is a composite rubble sample of hornblende diorite from a small pit. A 10 ft chip sample in the sanidine rhyolite porphyry averaged 0.034 oz/ton gold. Reverse circulation drill hole RGE 84-5 was angled toward the contact, and it passes beneath these two sample locations. The interval at the bottom of the hole, from 284 to 295 ft was the only interval with ore grade mineralization. It averaged 0.024 oz/ton gold.

The hill slope on the southeast side of Anchor Hill is soil covered and has poor outcrop exposure, so a soil sample grid was utilized to test for gold mineralization. The base line on the Anchor Hill soil grid, strikes N50°E, and perpendicular lines are 200 ft apart. Sample spacing is 100 ft. Rock chips in the sample holes indicate that the area is underlain by sanidine rhyolite porphyry and hornblende diorite. The mean of the soil gold values (table 1) is 88 ppb. This is considerably less than the 221 ppb mean for the East Gilt Edge grid, and strong enrichment of gold is not indicated. Only one sample is greater than the threshold value for the grid (table 8). Contoured gold values are shown on Figure 5.

West of Strawberry Creek

A portion of the area west of Strawberry Creek was traversed, and 24 samples were collected (fig. 6). The predominate lithology of the area is hornblende diorite, and later intrusive bodies of trachyte porphyry and sanidine rhyolite porphyry are located near Strawberry Creek. Several irregular roof pendants of Deadwood Formation are also present in the area. A zone of strong brecciation is evident at MacLeod's adit. Contacts are difficult to trace on the soil covered slopes around the trachyte and sanidine rhyolite porphyries. Four of the samples had anomalous values (table 9), however, the trachyte lacks the pervasive fracturing and iron-staining common in the main Gilt Edge area, and it appears to have limited potential for economic, leachable mineralization.

